

CLAIM AMENDMENTS

Please amend the claims as described below. In accordance with 37 CFR §1.121, a complete listing of all claims in the application is provided below. Notably, the status of each claim is indicated in the parenthetical expression adjacent to the corresponding claim number.

Claims 1-35 (Canceled).

1 36. (Currently Amended) An electromechanical device comprising:
2 a substrate;
3 a mechanical structure disposed over the substrate wherein a monolayer or self-
4 assembled layer is disposed on at least a portion of the mechanical structure;
5 a film encapsulation structure, disposed over the mechanical structure, to define and
6 seal a chamber;
7 an anti-stiction channel, etched into the film encapsulation structure, to provide
8 access to at least a portion of the mechanical structure disposed in the chamber; and
9 an anti-stiction plug, disposed over or in the anti-stiction channel, to re-seal the
10 chamber.

1 37. (Previously Presented) The device of claim 36 wherein the film encapsulation
2 structure includes first and second encapsulation layers.

1 38. (Previously Presented) The device of claim 37 wherein the first encapsulation
2 layer includes polycrystalline silicon, porous polycrystalline silicon, amorphous silicon,
3 silicon carbide, silicon nitride, silicon/germanium, germanium, or gallium arsenide.

1 39. **(Previously Presented)** The device of claim 37 wherein the second
2 encapsulation layer includes polycrystalline silicon, porous polycrystalline silicon,
3 amorphous silicon, germanium, silicon/germanium, gallium arsenide, or silicon carbide.

1 40. **(Previously Presented)** The device of claim 36 wherein the anti-stiction plug
2 includes spin-on polymer, SOG or a metal material.

1 41. **(Previously Presented)** The device of claim 36 wherein the anti-stiction plug
2 includes spin-on polymer or SOG which is deposited using silk screening.

1 42. **(Previously Presented)** The device of claim 36 wherein the anti-stiction plug
2 includes spin-on polymer or SOG which is deposited using dispensed seal-glass, plastic
3 and/or epoxy.

1 43. **(Previously Presented)** The device of claim 36 wherein the anti-stiction plug is
2 deposited using a shadow mask technology.

1 44. **(Previously Presented)** The device of claim 36 further including a trap,
2 disposed between the anti-stiction channel and the mechanical structure.

1 45. **(Previously Presented)** The device of claim 44 wherein the trap is a
2 substantially vertical trap.

1 46. **(Previously Presented)** The device of claim 44 wherein the trap is a
2 substantially horizontal trap.

1 47. **(Previously Presented)** The device of claim 36 further including a diffusion
2 barrier disposed over the anti-stiction plug.

1 48. **(Previously Presented)** The device of claim 47 wherein the diffusion barrier
2 includes a metal material.

Claims 49-62 **(Cancelled)**.

1 63. **(Currently Amended)** An electromechanical device comprising:
2 a substrate;
3 a mechanical structure disposed over the substrate wherein an anti-stiction layer is
4 disposed on at least a portion of the mechanical structure;
5 a film encapsulation structure, disposed over the mechanical structure, to define, in
6 part, a chamber;
7 an anti-stiction channel, formed in the film encapsulation structure, to allow the anti-
8 stiction layer to be disposed on at least the portion of the mechanical structure disposed in
9 the chamber; and
10 an anti-stiction plug, disposed over or in the anti-stiction channel, to re-seal the
11 chamber.

1 64. **(Previously Presented)** The device of claim 63 wherein the film encapsulation
2 structure includes first and second encapsulation layers.

1 65. **(Previously Presented)** The device of claim 64 wherein the first encapsulation
2 layer includes polycrystalline silicon, porous polycrystalline silicon, amorphous silicon,
3 silicon carbide, silicon nitride, silicon/germanium, germanium, or gallium arsenide.

1 66. **(Previously Presented)** The device of claim 64 wherein the second
2 encapsulation layer includes polycrystalline silicon, porous polycrystalline silicon,
3 amorphous silicon, germanium, silicon/germanium, gallium arsenide, or silicon carbide.

1 67. **(Previously Presented)** The device of claim 63 wherein the anti-stiction plug
2 includes spin-on polymer, SOG or a metal material.

1 68. **(Previously Presented)** The device of claim 63 wherein the anti-stiction plug
2 includes spin-on polymer or SOG which is deposited using silk screening.

1 69. **(Previously Presented)** The device of claim 63 wherein the anti-stiction plug
2 includes spin-on polymer or SOG which is deposited using dispensed seal-glass, plastic
3 and/or epoxy.

1 70. **(Previously Presented)** The device of claim 63 wherein the anti-stiction plug is
2 deposited using a shadow mask technology.

1 71. **(Previously Presented)** The device of claim 63 further including a trap,
2 disposed between the anti-stiction channel and the mechanical structure.

1 72. **(Previously Presented)** The device of claim 71 wherein the trap is a
2 substantially vertical trap.

1 73. **(Previously Presented)** The device of claim 71 wherein the trap is a
2 substantially horizontal trap.

1 74. **(Previously Presented)** The device of claim 71 wherein the trap includes a
2 substantially horizontal portion and a substantially vertical portion.

1 75. **(Previously Presented)** The device of claim 63 further including a diffusion
2 barrier disposed over the anti-stiction plug.

1 76. **(Previously Presented)** The device of claim 75 wherein the diffusion barrier is
2 a metal layer.

1 77. **(Previously Presented)** The device of claim 63 wherein the anti-stiction layer
2 is a monolayer or self-assembled layer.